

## Refine Search

### Search Results -

Term	Documents
(25 AND 26).USPT.	1
(L25 AND L26 ).USPT.	1

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:

L27

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Recall Text

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Interrupt

### Search History

 DATE: Tuesday, May 11, 2004    [Printable Copy](#)    [Create Case](#)

**Set Name Query**  
side by side

**Hit Count Set Name**  
result set

DB=USPT; PLUR=YES; OP=ADJ

L27    l25 and L26

1    L27

L26    Bos

15114    L26

L25    l24 and L23

28    L25

L24    l20 and L22

39    L24

L23    Exe

1058    L23

L22    IO or I/O

85629    L22

L21    l20 and exec engine

0    L21

L20    l18 and L19

39    L20

L19    Java

7607    L19

L18    l5 and l8 and l12 and l14

65    L18

L17    l16 and l8

1    L17

L16    l6.ab. and l14 and l5

9    L16

L15    l13 and L14

4    L15

→ 7<sup>th</sup> is Applicants patent

→ applicants patent

<u>L14</u>	cyclic\$ or interrupt\$	471566	<u>L14</u>
<u>L13</u>	l11 and L12	19	<u>L13</u>
<u>L12</u>	control program	36878	<u>L12</u>
<u>L11</u>	l9 and L10	20	<u>L11</u>
<u>L10</u>	execut\$	282093	<u>L10</u>
<u>L9</u>	l7 and L8	20	<u>L9</u>
<u>L8</u>	object oriented or OOP	11201	<u>L8</u>
<u>L7</u>	l5 and L6	109	<u>L7</u>
<u>L6</u>	programmable controller\$1	6589	<u>L6</u>
<u>L5</u>	function block	12304	<u>L5</u>
<u>L4</u>	L3 and bootstrap	1	<u>L4</u>
<u>L3</u>	PLC and Bos and ExE	1	<u>L3</u>
<u>L2</u>	PLC and Box and ExE	1	<u>L2</u>
<u>L1</u>	PLC and Box and ExE and Wd and IO	0	<u>L1</u>

END OF SEARCH HISTORY

## Hit List

Clear

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Fwd Refs

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Search Results - Record(s) 1 through 4 of 4 returned.

☐ 1. Document ID: US 6263487 B1

L15: Entry 1 of 4

File: USPT

Jul 17, 2001

US-PAT-NO: 6263487

DOCUMENT-IDENTIFIER: US 6263487 B1

TITLE: Programmable controller

DATE-ISSUED: July 17, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stripf; Wolfgang	Karlsruhe			DE
Wendel; Volker	Hagenbach			DE

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Siemens AG	Munich			DE	03

APPL-NO: 09/ 101611 [PALM]

DATE FILED: July 17, 1998

## FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
DE	296 00 609 U	January 17, 1996
DE	296 22 133 U	December 19, 1996

## PCT-DATA:

APPL-NO	DATE-FILED	PUB-NO	PUB-DATE	371-DATE	102(E)-DATE
PCT/DE97/00068	January 16, 1997	WO97/26587	Jul 24, 1997	Jul 17, 1998	Jul 17, 1998

INT-CL: [07] G06 F 19/00

US-CL-ISSUED: 717/1; 717/5, 717/6, 709/100

US-CL-CURRENT: 717/171; 718/100

FIELD-OF-SEARCH: 709/100, 709/101, 709/102, 709/104, 709/105, 717/1, 717/4, 717/5, 717/6, 707/10, 707/104, 707/206, 700/23

PRIOR-ART-DISCLOSED:

h e b b g e e f e ef b e

## U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5297257</u>	March 1994	Struger et al.	
<u>5485620</u>	January 1996	Sadre et al.	717/10
<u>5610809</u>	March 1997	Hideaki	700/23

## FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
667 693	August 1995	EP	

## OTHER PUBLICATIONS

"Mediator: an Intelligent Information System Supporting the Virtual Manufacturing Enterprise," B. R. Gaines et al., 1995 IEEE International Conference on Systems, Man and Cybernetics, Vancouver, Oct. 22-25, 1995, pp. 964-969.

"SIMATIC, Programmable Controllers SIMATIC S7," Catalog ST 70, Siemens, 1995.

"Java and Internet Programming," Van Hoff, Dr. Dobb's Journal, Aug. 1995, vol. 20, No. 8, pp. 56, 58, 60-61, and 101-02.

"Java!," T. Ritchey, New Riders Publishing, 1995, pp. 14-19.

"Supporting Microsoft Windows 95," Student Workbook, Course No. 540, Microsoft, Jul. 1995, pp. 120-121.

ART-UNIT: 211

PRIMARY-EXAMINER: Banakhah; Majid A.

ATTY-AGENT-FIRM: Staas & Halsey LLP

## ABSTRACT:

A programmable controller suitable for use in a globally distributed automation network. In addition, a universal management engineering and information system for such a globally distributed automation network is described. It is used in a globally distributed automation network.

11 Claims, 4 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. Des
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☐ 2. Document ID: US 6098116 A

L15: Entry 2 of 4

File: USPT

Aug 1, 2000

US-PAT-NO: 6098116

DOCUMENT-IDENTIFIER: US 6098116 A

TITLE: Process control system including a method and apparatus for automatically sensing the connection of devices to a network

DATE-ISSUED: August 1, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Nixon; Mark	Round Rock	TX		
Krivoshein; Ken D.	Elgin	TX		
Shepard; John R.	Austin	TX		
Christensen; Dan D.	Austin	TX		
Schleiss; Duncan	Austin	TX		

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Fisher-Rosemont Systems, Inc.	Austin	TX			02

APPL-NO: 08/ 631519 [PALM]

DATE FILED: April 12, 1996

## PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATIONS This application is related to application by Nixon et al., entitled "A Process Control System Using Standard Protocol Control of Standard Devices and Nonstandard Devices", now U.S. Pat. No. 5,828,851, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "A Process Control System for Versatile Control of Multiple Process Devices of Various Device Types", Ser. No. 08/631,521, filed on Apr. 12, 1996, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "Process Control System for Monitoring and Displaying Diagnostic Information of Multiple Distributed Devices" Ser. No. 08/631,557, filed on Apr. 12, 1996, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to application by Nixon et al., entitled "A Process Control System User Interface Including Selection of Multiple Control Languages", now U.S. Pat. No. 5,801,942, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to application by Dove, entitled "System for Assisting Configuring a Process Control Environment", now U.S. Pat. No. 5,940,294, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to application by Nixon et al., entitled "Process Control System Using a Control Strategy Implemented in a Layered Hierarchy of Control Modules", now U.S. Pat. No. 5,862,052, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to application by Dove et al., entitled "System for Configuring a Process Control Environment", now U.S. Pat. No. 5,838,563, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to application by Nixon et al., entitled "A Process Control System Using a Process Control Strategy Distributed Among Multiple Control Elements" now U.S. Pat. No. 5,909,368, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending provisional application by Nixon et al., entitled "Improved Process System", Serial No. 60/017,700, filed Apr. 12, 1996, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto.

INT-CL: [07] G06 F 13/14, G06 F 13/20

US-CL-ISSUED: 710/8; 710/10, 710/62, 709/220, 709/221, 709/250  
US-CL-CURRENT: 710/8; 709/220, 709/221, 709/250, 710/10, 710/62

FIELD-OF-SEARCH: 395/209.5, 395/200.51, 395/200.8, 370/94.1, 710/8, 710/10, 710/62,  
709/250, 709/220, 709/221

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4302820</u>	November 1981	Struger et al.	364/900
<u>4663704</u>	May 1987	Jones et al.	364/188
<u>4672530</u>	June 1987	Schuss	364/133
<u>4689786</u>	August 1987	Sidhu et al.	370/94
<u>4916610</u>	April 1990	Bapat	364/300
<u>5006992</u>	April 1991	Skeirik	364/513
<u>5063523</u>	November 1991	Vrenjak	364/514
<u>5129087</u>	July 1992	Will	395/650
<u>5134574</u>	July 1992	Beaverstock et al.	364/551.01
<u>5155842</u>	October 1992	Rubin	395/575
<u>5293466</u>	March 1994	Bringmann	395/114
<u>5307346</u>	April 1994	Fieldhouse	370/85.1
<u>5311562</u>	May 1994	Palusamy et al.	376/215
<u>5371985</u>	December 1994	Bristol	395/800
<u>5432711</u>	July 1995	Jackson et al.	364/514
<u>5442639</u>	August 1995	Crowder et al.	371/20.1
<u>5444851</u>	August 1995	Woest	395/200.1
<u>5475856</u>	December 1995	Kogge	395/800
<u>5481741</u>	January 1996	McKaskle et al.	395/800
<u>5485620</u>	January 1996	Sadre et al.	395/700
<u>5491791</u>	February 1996	Glowny et al.	395/183.13
<u>5493534</u>	February 1996	Mok	365/226
<u>5504902</u>	April 1996	McGarth et al.	395/700
<u>5513095</u>	April 1996	Pajonk	364/131
<u>5519706</u>	May 1996	Bantz et al.	370/85.3
<u>5519878</u>	May 1996	Dolin, Jr.	395/800
<u>5524269</u>	June 1996	Hamilton et al.	395/829
<u>5526489</u>	June 1996	Nilakantan et al.	395/200.02
<u>5530643</u>	June 1996	Hodorowski	364/191
<u>5537414</u>	July 1996	Takiyasu et al.	370/95.1
<u>5549137</u>	August 1996	Lenz et al.	137/486
<u>5550980</u>	August 1996	Pascucci et al.	395/200.05
<u>5566320</u>	October 1996	Hubert	395/474
<u>5576946</u>	November 1996	Bender et al.	364/146
<u>5596723</u>	January 1997	Romohr	395/200.16
<u>5623592</u>	April 1997	Carlson et al.	395/348

<u>5675748</u>	October 1997	Ross	395/284
<u>5682476</u>	October 1997	Tapperson et al.	395/200.05
<u>5701411</u>	December 1997	Tran et al.	395/200.1
<u>5706007</u>	January 1998	Fragnito et al.	341/155

## FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0 522 590	January 1993	DE	
2 208 553	April 1989	GB	
WO 95/04314	February 1995	WO	

## OTHER PUBLICATIONS

John R. Gyoriki, "PLC's drive standard buses", Machine Designs, May 11, 1995, pp. 83-90.

Moore Products Co., "Control System", Power Apr. 1995, p. 114, vol. 139, No. 4, Copyright 1995, McGraw-Hill, Inc.

Moore Products Co., "Apacs Control System", Power Jun. 1995, p. 81, vol. 139, No. 6, Copyright 1995, McGraw-Hill, Inc.

Robert R. Lyons, "New Telemecanique Programmable Controllers Feature Multiple Programming Languages", Telemecanique, Arlington Heights, IL, Feb. 11, 1995.

Clifford J. Peshek et al., "Recent Developments and Future Trends in PLC Programming Languages and Programming Tools for Real-Time Control", IEEE Cement Industry Technical Conference, May 1993, Toronto, Canada, pp. 219-230.

C.K. Duffer et al., "High-Level Control Language Customizes Application Programs", Power Technologies, Inc., IEEE Computer Applications in Power, .COPYRGT. Apr. 1991, pp. 15-18.

H.J. Beestermoller et al., "An online and offline programmable Multiple-Loop Controller for Distributed Systems", .COPYRGT. 1994 IEEE, pp. 15-20.

Blackwell, "The benefits won't kick-in immediately (Microsoft Windows 95 operating system's multimedia benefits)", Computing Canada, v21, n18, p36(2), Sep. 1, 1995.

Baldasserini, Denmac delivers LAN stats (Denmac Systems Inc's TrenData 2.0), Computer Shopper, v15, n6, p613(1), Jun. 1995.

ART-UNIT: 272

PRIMARY-EXAMINER: Lee; Thomas C.

ASSISTANT-EXAMINER: Perveen; Rehana

ATTY-AGENT-FIRM: Skjerven, Morrill, MacPherson, Franklin & Friell, LLP. Koestner; Ken J.

## ABSTRACT:

A digital control system automatically senses when a new controller is attached to a network and determines the number and types of I/O Ports that are attached to the new controller. The digital control system formats and displays the I/O Port information upon request by a user. The digital control system program also includes an automatic configuration program that responds to sensing of a new controller by automatically configuring the input/output (I/O) subsystem. The user adds a new controller without setting any physical switches or nodes. A user optionally supplies configuration information for a device into a database, prior to connection of a device. Upon connection of the device, the device is

automatically sensed and configured using the database configuration information, without setting of physical switches or node address information on the devices.

40 Claims, 25 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RWMC	Draw D
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☐ 3. Document ID: US 6032203 A

L15: Entry 3 of 4

File: USPT

Feb 29, 2000

US-PAT-NO: 6032203

DOCUMENT-IDENTIFIER: US 6032203 A

TITLE: System for interfacing between a plurality of processors having different protocols in switchgear and motor control center applications by creating description statements specifying rules

DATE-ISSUED: February 29, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Heidhues; Peter Albert	Aukrug			DE

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
General Electric Company	Schenectady	NY			02

APPL-NO: 08/ 834569 [PALM]

DATE FILED: April 7, 1997

INT-CL: [07] G06 F 13/10, G06 F 13/42, G06 F 15/163

US-CL-ISSUED: 710/11; 710/30, 710/65, 709/230, 709/232, 709/236, 709/302

US-CL-CURRENT: 710/11; 709/230, 709/232, 709/236, 710/30, 710/65

FIELD-OF-SEARCH: 709/230, 709/232, 709/236, 709/302, 710/105, 710/8, 710/11, 710/30, 710/65

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>5414812</u>	May 1995	Filip et al.	707/103
<u>5428555</u>	June 1995	Starkey et al.	364/528.1
<u>5471596</u>	November 1995	Brown, III	707/103
<u>5630101</u>	May 1997	Sieffert	395/500
<u>5634010</u>	May 1997	Ciscon et al.	709/223
<u>5652911</u>	July 1997	Venrooy et al.	395/80
<u>5687373</u>	November 1997	Holmes et al.	709/302



<u>5768119</u>	June 1998	Havekost et al.	364/133
<u>5793954</u>	August 1998	Baker et al.	709/250
<u>5828576</u>	October 1998	Loucks et al.	324/118

ART-UNIT: 272

PRIMARY-EXAMINER: Lee; Thomas C.

ASSISTANT-EXAMINER: Park; Ilwoo

ATTY-AGENT-FIRM: Cantor Colburn LLP Horton; Carl B.

## ABSTRACT:

An interface system for use in switchgear and motor control center applications so that communications may occur between different field devices and process control computers using different protocols and requiring different data formats. The interface system translates fieldbus protocols and data formats using a changeable communication driver module employing a description language defining pieces of data called "telegrams." The telegrams contain object structures related to the communication processor or protocol used by the field devices and process control computers. The system also allows for dynamic configurations given the changeable communication driver.

12 Claims, 9 Drawing figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMMC	Draw. Des.
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☐ 4. Document ID: US 5980078 A

L15: Entry 4 of 4

File: USPT

Nov 9, 1999

US-PAT-NO: 5980078

DOCUMENT-IDENTIFIER: US 5980078 A

TITLE: Process control system including automatic sensing and automatic configuration of devices

DATE-ISSUED: November 9, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Krivoshein; Ken D.	Elgin	TX		
Christensen; Dan D.	Austin	TX		

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Fisher-Rosemount Systems, Inc.	Austin	TX			02

APPL-NO: 08/ 799966 [PALM]

DATE FILED: February 14, 1997

h e b b g e e e f e ef b e

## PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATIONS This application is related to of copending application by Nixon et al., entitled "Process Control System Including Automatic Sensing and Automatic Configuration of Devices", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,519, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "A Process Control System Using Standard Protocol Control of Standard Devices and Nonstandard Devices", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,862, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "A Process Control System for Versatile Control of Multiple Process Devices of Various Device Types", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,521, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "Process Control System for Monitoring and Displaying Diagnostic Information of Multiple Distributed Devices", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,557, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "A Process Control System User Interface Including Selection of Multiple Control Languages", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,517, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Dove, entitled "System for Assisting Configuring a Process Control Environment", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,458, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "Process Control System Using a Control Strategy Implemented in a Layered Hierarchy of Control Modules", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,520, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Dove et al., entitled "System for Configuring a Process Control Environment", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,863, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "A Process Control System Using a Process Control Strategy Distributed Among Multiple Control Elements", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,518, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "Improved Process System", filed on Apr. 12, 1996, U.S. Provisional patent application Ser. No. 60/017,700, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto.

INT-CL: [06] G06 F 15/16

US-CL-ISSUED: 364/131; 364/138, 364/146, 364/147, 395/200.51, 395/200.52

US-CL-CURRENT: 700/1; 700/17, 700/18, 700/9, 709/221, 709/222

FIELD-OF-SEARCH: 395/284, 395/651-653, 395/823, 395/828-832, 395/834-837, 395/839, 395/200.5, 395/200.51, 395/200.52, 395/200.58, 364/131, 364/138, 364/146, 364/147

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

h e b b g e e e f e ef b e

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4302820</u>	November 1981	Struger et al.	395/598
<u>4663704</u>	May 1987	Jones et al.	364/188
<u>4672530</u>	June 1987	Schuss	364/133
<u>4689786</u>	August 1987	Sidhu et al.	370/255
<u>4916610</u>	April 1990	Bapat	395/708
<u>5006992</u>	April 1991	Skeirik	706/58
<u>5063523</u>	November 1991	Vrenjak	395/200.53
<u>5129087</u>	July 1992	Will	395/704
<u>5134574</u>	July 1992	Beaverstock et al.	702/84
<u>5155842</u>	October 1992	Bringmann	395/114
<u>5307346</u>	April 1994	Fieldhouse	370/254
<u>5311562</u>	May 1994	Palusamy et al.	376/215
<u>5371895</u>	December 1994	Bristol	395/705
<u>5432711</u>	July 1995	Jackson et al.	364/131
<u>5442639</u>	August 1995	Crowder et al.	371/20.1
<u>5444851</u>	August 1995	Woest	709/222
<u>5471190</u>	November 1995	Zimmermann	340/310.01
<u>5471461</u>	November 1995	Engdahl et al.	370/252
<u>5475856</u>	December 1995	Kogge	712/20
<u>5481741</u>	January 1996	McKaskle et al.	345/522
<u>5485620</u>	January 1996	Sadre et al.	395/710
<u>5491791</u>	February 1996	Glowny et al.	714/26
<u>5493534</u>	February 1996	Mok	365/226
<u>5504902</u>	April 1996	McGrath et al.	395/707
<u>5513095</u>	April 1996	Pajonk	364/131
<u>5519706</u>	May 1996	Bantz et al.	455/435
<u>5519878</u>	May 1996	Dolin, Jr.	395/200.5
<u>5524269</u>	June 1996	Hamilton et al.	710/9
<u>5526489</u>	June 1996	Nilakantan et al.	395/200.58
<u>5530643</u>	June 1996	Hodorowski	364/191
<u>5549137</u>	August 1996	Lenz et al.	137/486
<u>5550980</u>	August 1996	Pascucci et al.	709/223
<u>5566320</u>	October 1996	Hubert	711/147
<u>5566346</u>	October 1996	Andert et al.	364/146
<u>5576946</u>	November 1996	Bender et al.	364/146
<u>5596723</u>	January 1997	Romohr	395/200.52
<u>5623592</u>	April 1997	Carlson et al.	345/348
<u>5675748</u>	October 1997	Ross	395/284
<u>5682476</u>	October 1997	Tapperson et al.	370/225
<u>5694335</u>	December 1997	Hollenberg	395/187.01
<u>5701411</u>	December 1997	Tran et al.	395/200.8
<u>5706007</u>	January 1998	Fragnito	341/155

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0 522 590	January 1993	DE	
2 208 553	April 1989	GB	
WO 95/04314	February 1995	WO	

## OTHER PUBLICATIONS

Blackwell, The benefits won't kick-in immediately (Microsoft Windows 95 operating system's multimedia benefits), Computing Canada, v21, n18, p36(2), Sep. 1995.  
Baldasserini, Denmac delivers LAN stats (Denmac Systems Inc's TrenData 2.0), Computer Shopper, v15, n6, p613(1), Jun. 1995.  
PCT/US 98/01573 International Search Report, dated Nov. 25, 1998.  
S.N. Chau, et al., "A Multi-Mission Space Avionics Architecture," Proc. 1996 IEEE Aerospace Applications Conference, vol. 1, pp. 165-176, Feb. 1996.  
John R. Gyorki, "PLC's drive standard buses", Machine Designs, May 11, 1995, pp. 83-90.  
Moore Products Co., "Control System", POWER Apr. 1995, p. 11 4, vol. 139, No. 4, Copyright 1995, McGraw-Hill, Inc.  
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## ABSTRACT:

A digital control system with a predetermined configuration automatically senses the connection to a network of a digital device that is not included in the predetermined configuration. The digital device is assigned temporary address information and placed in a temporary state, called a standby state, in which the digital device supplies information to the digital control system allowing a user to access the digital device including access of device information and configuration parameters. Using the device information and configuration parameters, a user selectively commissions the digital device by assigning a physical device tag, a device address, and a device identification, and installing a control strategy to the digital device, thereby placing the digital device in an operational state in communication with the digital control system. In the standby state, a user interrogates to determine the type of device that is attached, determines the role of the device in the context of the digital control system, assigns a physical device tag that assigns the determined role to the device, and verifies connection of the device to the network. Also in the standby state, the user initiates other applications applied to the device, including calibration of the device and configuring the device within the overall control scheme of the digital control system.